भारतीय रासायनिक जीवविज्ञान संस्था
४, राजा एस० सी० मल्लिक रोड, यादवपुर, कलकत्ता-७०००३२
INDIAN INSTITUTE OF CHEMICAL BIOLOGY
4, RAJA S. C. MULLICK ROAD, JADAVPUR, CALCUTTA-700032
ভারতীয় রাসায়নিক জীববিজ্ঞান সংস্থা
৪, রাজা এস, সি, মল্লিক রোড, কলিকাতা-৭০০০৩২

संख्या
No.

दिनांक Sept 18, 1984
Date

प्रेषक :
From Prof. B.K.Bachhawat
Director

निर्देशक :
The Director Dr Marshall Nirenberg,
National Institutes of Health, Bldg 36, Rm 1C-06,
Bethesda Md 20205, USA

Dear Marshall,

It was indeed a pleasure to meet you during my last visit to USA. This letter is to request you, if possible, to provide an opportunity to Dr P.K.Sarkar, one of the senior scientists of the Institute, to do some collaborative work in your laboratory as a Visiting Scientist.

The main result of the work from Dr Sarkar's laboratory here established that in developing rats and chicks, thyroid hormones promote brain maturation by eliciting an induction of tubulin. They now have probes (cDNAs for α- and β-tubulin which are being employed to test the effects of the hormone on transcription of tubulin mRNA. Dr Sarkar and his colleagues developed a new procedure for the isolation of protoplasmic astrocytes and are currently using monoclonal antibodies to cell surface proteins to fractionate various subclasses of neurons.

Based on the effect of thyroid hormones on fractionated neuronal and glial cells, they have shown in a manuscript just communicated that contrary to the expectation, the glial cells are the target cells for the hormone and the neurons are virtually insensitive to induction of tubulin by thyroid hormones.Most interestingly, chase experiments show that under the influence of the hormone, there is a translocation of of tubulin from glial to neuronal cells at the time of brain maturation presumably to satisfy the large need of this protein for neuronal differentiation and synaptogenesis.

Dr Sarkar, whose CV and list of publications are enclosed,desires to pursue further research on the hormone induced translocation of tubulin using cultures and cocultures of neuronal and glial cells. He is also interested to work on mechanisms of regulation of synaptogenesis.

In view of your interest in the area of brain maturation during development, I do believe that such collaboration would be of great help to Dr Sarkar and his efforts to develop the Neurobiology unit here. Dr Sarkar wishes to spend about a year at NIH beginning April,1985. I would appreciate if you please let me know your opinion in the matter including the possibility of financial support for Dr Sarkar.

With kind regards,

OCT 1984

Sincerely yours,

(Bimal K Bachhawat)

Linda: Graham

Phone : Office : 46-3491 (3 Lines) Telegram : 'LIVINGCELL', Telex : 7108 Back Code IICB
फोन : ऑफिस : 46-3491 (3 Lines) टेलिग्राम : 'LIVINGCELL' टेलेक्स : 7108 Back Code IICB